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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 09/936,492 | 09/11/2001 | David John Hollick | B&H011US5487 | 7155 |
| 7590 07/26/2004 | | | EXAMINER | |
| Marguerite Gerstner Tyco Electronics Corporation 307 Constitution Drive MS R20 2B Menlo Park, CA 94025-1164 | | | LEON, EDWIN A | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2833 | |

DATE MAILED: 07/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 09/936,492 | HOLLICK, DAVID JOHN | |
| | Examiner | Art Unit | |
| | Edwin A. León | 2833 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 May 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 and 8-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 8-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Applicant's Appeal Brief filed May 10, 2004 has been placed of record in the file.
2. In view of the Appeal Brief filed on May 10, 2004, PROSECUTION IS HEREBY REOPENED. New grounds of rejection are set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

- (1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,
- (2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

Claim Objections

3. Claim 1 is objected to because of the following informalities: Claim 1, Line 7, should read "at least one respective threaded bore" since the Drawings and the Specification only refers to a threaded bore and not a plurality of bores. Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 6, 13-14, 17, 20-22 and 24-29 rejected under 35 U.S.C. 102(b) as being anticipated by McGrath (U.S. Patent No. 3,125,397). With regard to Claims 1, 13-14, 17, 20-22 and 24-29, McGrath discloses an electrical connector (Fig. 1) comprising a connector body (1) including a tubular socket (2) configured to receive an electrical conductor (11), clamping means (9) arranged to secure the electrical conductor (11) within the socket (2), and a tubular socket insert (6) and fitting within the tubular socket (2) so as to reduce the effective size of the socket (2) and the socket insert (6) having a diameter selected to reduce an effective diameter of the socket (2) to reduce eccentricity of positioning of the electrical conductor (11) within the electrical connector (Fig. 1), the clamping means (9) comprising at least one clamping bolt (9) held in respective threaded bores (8) in the connector body (1) such that the at least one clamping bolt (9) extends into the socket (2) so as to clamp, via the socket insert (6) and the electrical conductor (11) is received within the tubular socket (2) insert to position the socket insert (6) between the clamping member (6) and the electrical connector (Fig. 1) and between an opposing surface of the socket (2) relative to the clamping member (9) and the electrical conductor (11). See Figs. 1 and 3.

With regard to Claim 6, McGrath discloses the socket (2) being a bore (defined by the inner walls of 2) of substantially circular cross-section. See Figs. 1 and 3.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 2 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over McGrath (U.S. Patent No. 3,125,397) in view of Dupont (U.S. Patent No. 5,630,737).

With regard to Claims 2 and 19, McGrath discloses the claimed invention except the socket insert being aluminum.

Dupont discloses a socket (1) made of aluminum. See Fig. 1, and Column 3, Lines 9-16.

Thus, it would have been obvious to one with ordinary skill in the art to modify the connector of McGrath by using aluminum to make the socket insert as taught in Dupont in order to improve the electrical conductivity of the insert.

8. Claims 3-4, 9, 11-12, 15-16, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over McGrath (U.S. Patent No. 3,125,397) in view of Pranch (U.S. Patent No. 4,687,273). With regard to Claims 3-4, 9, 11-12, 15-16, and 23, McGrath discloses

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the claimed invention as shown above except for the insert having a castellated or a corrugated profile on an outside surface.

Pranch discloses a connector having socket insert (2) having a castellated or corrugated profile (4) on an outside surface. See Fig. 1.

Thus, it would have been obvious to one with ordinary skill in the art to modify the connector of McGrath by including a castellated or corrugated profile on an outside surface of the socket insert as taught in Pranch to improve the mechanical strength of the retaining engagement between the connector and the insert.

9. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over McGrath (U.S. Patent No. 3,125,397) in view of Pranch (U.S. Patent No. 4,687,273) and Dupont (U.S. Patent No. 5,630,737). With regard to Claim 10, the combination of McGrath and Pranch disclose the claimed invention as shown above except the socket insert being aluminum.

Dupont discloses a socket (1) made of aluminum. See Fig. 1, and Column 3, Lines 9-16.

Thus, it would have been obvious to one with ordinary skill in the art to modify the connector of McGrath by using aluminum to make the socket insert as taught in Dupont in order to improve the electrical conductivity of the insert.

10. Claims 5 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over McGrath (U.S. Patent No. 3,125,397) in view of Lamome (U.S. Patent No. 5,422,438). With regard to Claims 5 and 18, McGrath discloses the claimed invention except for the insert having an internal surface having a castellated or a corrugated profile.

Lamome discloses a connector having an insert with an internal surface of the tubular socket insert (3) having a castellated or a corrugated profile (8). See Figs. 1-2

Thus, it would have been obvious to one with ordinary skill in the art to modify the connector of McGrath by including a castellated or corrugated profile on an inside surface of the socket insert as taught in Lamome to improve the mechanical strength of the retaining engagement between the conductor and the insert.

11. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over McGrath (U.S. Patent No. 3,125,397) in view of Polidori (U.S. Patent No. 5,320,565). McGrath discloses the claimed invention except at least one clamping bolt including a shearable head that shears off when a torque applied to the shearable head exceeds a predetermined value.

Polidori discloses a connector (10) having at least one clamping bolt (46) including a shearable head (45) that shears off when a torque applied to the shearable head (45) exceeds a predetermined value. See Fig. 4 and Column 38-47.

Thus, it would have been obvious to one with ordinary skill in the art to modify the connector of McGrath by including at least one clamping bolt including a shearable head that shears off when a torque applied to the shearable head exceeds a predetermined value as taught in Polidori to prevent over torquing.

Response to Arguments

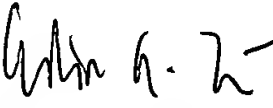
12. Applicant's arguments with respect to claims 1-6 and 8-29 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

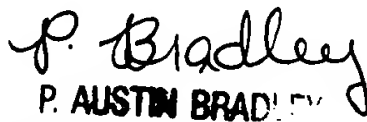
13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edwin A. León whose telephone number is (571) 272-2008. The examiner can normally be reached on Monday - Friday 10:00-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula A. Bradley can be reached on 571-272-2800, extension 33. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Edwin A. Leon
AU 2833

EAL
July 19, 2004


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